

Techniques for the extraction of phytosterols and their benefits in human health: a review

ABSTRACT

This review summarizes the information on the health-promoting effects of phytosterols and the techniques for their extraction. The extraction and analysis processes of phytosterols are complex and have not been fully established. Phytosterols have significant roles in the areas of foods, nutrition, pharmaceuticals, and cosmetics. Free phytosterols extracted from plant sources are widely used in fortified foods and dietary supplements. Most phytosterols are extracted from plant matrices using organic solvents which are health and environmental hazards. However, the application of supercritical fluid in the extraction of phytosterols has offered a promising green technology in overcoming the limitations of conventional extraction.